

### **AMENDMENTS TO THE SPECIFICATION**

Please replace paragraph [0040] with the following amended paragraph:

[0040] The results of step 221 are a set of MSEs for the various translations of the likely overlay area for the given (subsequent) frame. From these MSEs, a minimum one is selected, and the area (i.e., translation) corresponding to that minimum MSE is selected 222 as the location of the likely overlay area in that frame. Additionally, the coordinates corresponding to the particular pixel (i.e., the pixel having the coordinates  $(a,b)$  in the frame in which the likely overlay area was detected) are recorded for the selected minimum MSE. The selected MSE is then compared with a predetermined maximum MSE ("Max MSE") 223. In an exemplary embodiment, Max MSE = 50. If the MSE is less than Max MSE, then it is determined whether the recorded coordinates corresponding to the particular pixel, denoted  $(x_i, y_i)$  in Figure 6, are equal, or approximately equal, to  $(a,b)$  ~~226~~ 224. By "approximately equal," it is meant that the recorded coordinates may differ from  $(a,b)$  by some predetermined amount; in one exemplary embodiment, this amount is set to one pixel in either coordinate. If the coordinates are not (approximately) equal, then a count is incremented 227. This count keeps track of the number of consecutive frames in which the recorded coordinates differ from  $(a,b)$ . The count is compared to a predetermined threshold, denoted Max Count in Figure 6, to determine whether the count is below Max Count 228. Max Count represents a maximum number of frames in which the recorded coordinates may differ; in an exemplary embodiment, Max Count is a whole number less than or equal to six. If the count is below Max Count, then the method returns to step 221 to restart the process for the next (subsequent consecutive) frame. If, on the other hand, the count is not less than Max Count, then step ~~224~~ 225 is executed, as discussed below.

Please replace paragraph [0041] with the following amended paragraph:

[0041] If the coordinates are determined, in step ~~226~~ 224, to be (approximately) equal, then the count is cleared or decremented 229, whichever is determined to be preferable by the system designer. Whether clearing or decrementing is chosen may depend upon how large Max Count is chosen to be. If Max Count is small (for example, two), then clearing the count may be preferable, to ensure that once the coordinates are found to match after a small number of errors, a single further error will not result in the method coming perilously close to deciding that tracking should cease; this is of particular concern in a noise environment. On the other hand, decrementing may be preferable if Max Count is chosen to be large (for example, five), in order to prevent a single non-occurrence of a match from resetting the count in the case of a run of consecutive errors. Following decrementing or clearing 229, the method returns to step 221 to restart the process for the next (subsequent consecutive) frame.

Please replace paragraph [0042] with the following amended paragraph:

[0042] If the MSE is greater than Max MSE or the count exceeds Max Count, this indicates that the likely overlay area may no longer be the same or that it may no longer be in or near its original location. If this is the case, then step ~~224~~ 225 is executed to determine whether or not the likely overlay area persisted long enough to be considered a static overlay. This is done by determining whether or not the number of subsequent consecutive frames processed exceeds some predetermined number "Min Frames." In general, Min Frames will be chosen such that a viewer

would notice a static overlay. In an exemplary embodiment of the invention, Min Frames corresponds to at least about two seconds, or at least about 60 frames. If the number of frames having an MSE less than Max MSE (and constant coordinates of the particular pixel) exceeds Min Frames, then it is determined that the likely overlay area is a candidate overlay, and the process proceeds to spatial verification 21. If not, then the likely overlay area is determined not to be a static overlay area-~~225~~ 226.

Please replace paragraph [0048] with the following amended paragraph:

[0048] Returning to Figure 4, the result of structure confidence determination 211 is tested in Step 212. In one embodiment, if  $C_1$  exceeds a threshold,  $\alpha$ , then the area is tentatively determined to be a textual overlay 213, and if not, the process proceeds to texture confidence determination 214. Here,  $\alpha$  is a real number between 0.5 and 1; in an exemplary embodiment,  $\alpha = 0.6$ .